

**MITANN ZIP-CHEM PRODUCTS DIV OF ANDPAK -- D-5460 MOLY DRY LUBE CODE 63 1078 - LUBRIC
MATERIAL SAFETY DATA SHEET**

NSN: 9150010572576

Manufacturer's CAGE: 8E913

Part No. Indicator: B

Part Number/Trade Name: D-5460 MOLY DRY LUBE CODE 63 1078

General Information

Item Name: LUBRICANT, SOLID FILM

Company's Name: MITANN INC ZIP-CHEM PRODUCTS INC DIV OF ANDPAK INC

Company's Street: 1860 DOBBIN DR

Company's City: SAN JOSE

Company's State: CA

Company's Country: US

Company's Zip Code: 95133

Record No. For Safety Entry: 003

Tot Safety Entries This Stk#: 006

Status: SM

Date MSDS Prepared: 20AUG90

Safety Data Review Date: 08FEB93

Supply Item Manager: CX

MSDS Preparer's Name: DEAN DARWIN

MSDS Serial Number: BPXFW

Hazard Characteristic Code: J7

Unit Of Issue: CN

Unit Of Issue Container Qty: 16.0 OZ

Type Of Container: CAN

Net Unit Weight: 16.0 OZ

Ingredients/Identity Information

Proprietary: NO

Ingredient: METHYL CHLOROFORM (1, 1, 1-TRICHLOROETHANE) (SARA III)

Ingredient Sequence Number: 01

Percent: 40 %

NIOSH (RTECS) Number: KJ2975000

CAS Number: 71-55-6

OSHA PEL: 350 PPM/450 STEL

ACGIH TLV: 350 PPM/450 STEL; 9192

Other Recommended Limit: NONE SPECIFIED

Proprietary: NO

Ingredient: XYLENES (O-, M-, P- ISOMERS) (SARA III)

Ingredient Sequence Number: 02

Percent: 1 %

NIOSH (RTECS) Number: ZE2100000

CAS Number: 1330-20-7

OSHA PEL: 100 PPM/150 STEL

ACGIH TLV: 100 PPM/150 STEL; 9192

Other Recommended Limit: NONE SPECIFIED

Proprietary: NO

Ingredient: MOLYBDENUM DISULFIDE

Ingredient Sequence Number: 03

Percent: <5.0

NIOSH (RTECS) Number: QA4697000

CAS Number: 1317-33-5
OSHA PEL: NOT ESTABLISHED
ACGIH TLV: NOT ESTABLISHED
Other Recommended Limit: 15 MG/M3 PEL

Proprietary: NO
Ingredient: DIETHYLENE GLYCOL MONOETHYL ETHER
Ingredient Sequence Number: 04
Percent: 0.17 %
NIOSH (RTECS) Number: KK8750000
CAS Number: 111-90-0
OSHA PEL: NOT ESTABLISHED
ACGIH TLV: NOT ESTABLISHED
Other Recommended Limit: 25 PPM

Proprietary: NO
Ingredient: HEXYLENE GLYCOL
Ingredient Sequence Number: 05
Percent: <0.5
NIOSH (RTECS) Number: SA0810000
CAS Number: 107-41-5
OSHA PEL: C 25 PPM
ACGIH TLV: C 25 PPM; 9192
Other Recommended Limit: NONE SPECIFIED

Proprietary: NO
Ingredient: PROPYLENE GLYCOL MONOMETHYL ETHER
Ingredient Sequence Number: 06
Percent: <0.5
NIOSH (RTECS) Number: UB7700000
CAS Number: 107-98-2
OSHA PEL: 100 PPM/150 STEL
ACGIH TLV: 100 PPM/150STEL; 9192
Other Recommended Limit: NONE SPECIFIED

Proprietary: NO
Ingredient: 1, 1, 2- TRICHLORO- 1, 2, 2- TRIFLUOROETHANE (FREON 113) (SARA III)
Ingredient Sequence Number: 07
Percent: 35 %
NIOSH (RTECS) Number: KJ4000000
CAS Number: 76-13-1
OSHA PEL: 1000PPM/1250STEL
ACGIH TLV: 1000PPM/1250STEL9293
Other Recommended Limit: NONE SPECIFIED

Proprietary: NO
Ingredient: CHLORODIFLUOROMETHANE
Ingredient Sequence Number: 08
Percent: 20 %
NIOSH (RTECS) Number: PA6390000
CAS Number: 75-45-6
OSHA PEL: 1000 PPM
ACGIH TLV: 1000PPM; 9293
Other Recommended Limit: NONE SPECIFIED

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Physical /Chemical Characteristics

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Appearance And Odor: DARK LIQUID WITH IRRITATING ODOR AT HIGH CONCENTRATION

Vapor Density (Air=1): >1.0

Specific Gravity: 1.4

Decomposition Temperature: UNKNOWN

Evaporation Rate And Ref: FASTER THAN ETHER

Solubility In Water: NEGLIGIBLE

Corrosion Rate (IPY): UNKNOWN

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Fire and Explosion Hazard Data

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Flash Point: NONE AEROSOL

Lower Explosive Limit: 1.0

Upper Explosive Limit: 15.0

Extinguishing Media: USE FOAM, ALCOHOL FOAM, CARBON DIOXIDE, DRY CHEMICAL, WATER FOG

Special Fire Fighting Proc: WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS. EVACUATE AREA. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

Unusual Fire And Expl Hazrds: CONTAINERS MAY EXPLODE ; COMBUSTION OR HEAT OF FIRE MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS. VAPORS MAY DEVELOP A FLAMMABLE ATMOSPHERE.

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Reactivity Data

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Stability: YES

Cond To Avoid (Stability): HIGH HEAT, OPEN FLAMES AND OTHER SOURCES OF IGNITION

Materials To Avoid: WATER-LONGTERM WILL PRODUCE CORROSIVE ACIDS. AVOID PROLONGED CONTACT WITH OR STORAE IN ALUMINUM OR ITS ALLOYS.

Hazardous Decomp Products: HYDROGEN CHLORIDE AND VERY SMALL AMOUNTS OF PHOSGENE AND CHLORINE.

Hazardous Poly Occur: NO

Conditions To Avoid (Poly): NONE. WILL NOT OCCUR.

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Health Hazard Data

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LD50- LC50 Mixture: NOT SPECIFIED BY MANUFACTURER.

Route Of Entry - Inhalation: YES

Route Of Entry - Skin: YES

Route Of Entry - Ingestion: YES

Health Haz Acute And Chronic: ACUTE: IRRITATION OF EYES, SKIN, RESPIRATORY OR G. I. TRACTS; CNS EFFECTS LIKE HEADACHE, DIZZINESS, NAUSEA AND VOMITING. REDNESS OR BURNS OF EYES/SKIN POSSIBLE. CHRONIC: DRYING OF SKIN, DEFATTING OR DERMATITIS, DAMAGE TO LUNGS, EYES OR CARDIAC IRREGULARITIES.

Carcinogeni ci ty - NTP: YES

Carcinogeni ci ty - IARC: YES

Carcinogeni ci ty - OSHA: YES

Explanation Carcinogeni ci ty: DATA PER MSDS

Signs/Symptoms Of Overexp: MAY CAUSE IRRITATION OF EYES, SKIN, RESPIRATORY OR G. I. TRACTS; MAY CAUSE HEADACHE, DIZZINESS, NAUSEA, VOMITING OR GI TRACT DISTURBANCES POSSIBLE. BURNS OR REDNESS OF EYES/CRACKING OR DRYNESS OF SKIN.

Med Cond Aggravated By Exp: PERSONS WITH A HISTORY OF AILMENTS OR WITH A PRE- EXISTING DISEASE INVOLVING THE EYES, SKIN, OR RESPIRATORY TRACT MAY BE AT INCREASED RISK FROM EXPOSURE.

Emergency/First Aid Proc: INHALATION: REMOVE TO FRESH AIR. RESUSCITATE IF NOT BREATHING. GET MEDICAL ATTENTION. EYES: IMMEDIATELY FLUSH WITH PLENTY OF

REMOVE CONTAMINATED CLOTHING. WASH WITH SOAP AND WATER. IF IRRITATION PERSISTS, GET MEDICAL ADVICE. INGESTION: DO NOT INDUCE VOMITING. GIVE NOTHING BY MOUTH IF UNCONSCIOUS. GET IMMEDIATE MEDICAL ATTENTION.

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Precautions for Safe Handling and Use

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Steps If Matl Released/Spill: USE PROPER PERSONAL PROTECTION; VENTILATE THE AREA. CONTAIN FREE MATERIAL IF POSSIBLE; USE SUITABLE INERT ABSORBENT MATERIAL AND RECOVER FOR PROPER DISPOSAL IN AN APPROVED CONTAINER.

Neutralizing Agent: NOT APPLICABLE.

Waste Disposal Method: CONSULT LOCAL AUTHORITIES. DISPOSAL MUST BE MADE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

Precautions- Handling/Storing: STORE IN A COOL, DRY, WELL VENTILATED AREA. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. PROTECT CONTAINERS FROM PHYSICAL DAMAGE.

Other Precautions: DO NOT TAKE INTERNALLY. DO NOT BREATHE MIST. AVOID PROLONGED OR REPEATED BREATHING OF VAPOR. AVOID CONTACT WITH EYES. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING.

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Control Measures

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Respiratory Protection: USE NIOSH/MSHA APPROVED RESPIRATOR AS REQUIRED IF ABOVE PEL/TLV OR SCBA IN AN ENCLOSED AREA.

Ventilation: LOCAL/GENERAL TO MAINTAIN PEL/TLV.

Protective Gloves: NEOPRENE, NITRILE, OR NATURAL RUBBER

Eye Protection: SAFETY GOGGLES WITH OPTIONAL FACE SHIELD

Other Protective Equipment: EYE WASH STATION AND SAFETY SHOWER, WORK CLOTHING AND APRON AS REQUIRED.

Work Hygienic Practices: OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING OR FOOTWEAR.

Suppl. Safety & Health Data: AVOID PROLONGED OR REPEATED EXPOSURE. DO NOT GET ON SKIN OR IN EYES. DO NOT BREATHE VAPORS OR MISTS.

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Transportation Data

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Trans Data Review Date: 93039

DOT PSN Code: DTJ

DOT Symbol: D

DOT Proper Shipping Name: CONSUMER COMMODITY

DOT Class: ORM-D

DOT Label: NONE

IMD PSN Code: AIY

IMD Proper Shipping Name: AEROSOL DISPENSERS

IMD Regulations Page Number: 9022

IMD UN Number: 1950

IMD UN Class: 9

IMD Subsidiary Risk Label: -

IATA PSN Code: ANB

IATA UN ID Number: 1950

IATA Proper Shipping Name: AEROSOLS, 20, *

IATA UN Class: 2.2

IATA Label: NON-FLAMMABLE GAS

AFI PSN Code: ANB

AFI Prop. Shipping Name: AEROSOLS, NON-FLAMMABLE, N. O. S.

AFI Class: 2.2

AFI ID Number: UN1950

AFI Basic Pac Ref: 6-6

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Disposal Data

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Label Data

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Label Required: YES

Technical Review Date: 08FEB93

MFR Label Number: NONE

Label Status: F

Common Name: D-5460 MOLY DRY LUBE; PRODUCT CODE: 63-1078

Chronic Hazard: NO

Signal Word: WARNING!

Acute Health Hazard-Slight: X

Contact Hazard-Moderate: X

Fire Hazard-None: X

Reactivity Hazard-None: X

Special Hazard Precautions: VAPORS MAY CAUSE DIZZINESS OR SUFFOCATION.
CONTACT WITH LIQUID MAY CAUSE FROSTBITE. FIRE MAY PRODUCE IRRITATING OR
POISONOUS GASES. FIRST AID: INHALATION: REMOVE TO FRESH AIR. RESUSCITATE IF
NOT BREATHING. GET MEDICAL ATTENTION. EYES: IMMEDIATELY FLUSH WITH PLENTY OF
REMOVE CONTAMINATED CLOTHING. WASH WITH SOAP AND WATER. IF IRRITATION
PERSISTS, GET MEDICAL ADVICE. INGESTION: DO NOT INDUCE VOMITING. GIVE
NOTHING BY MOUTH IF UNCONSCIOUS. GET IMMEDIATE MEDICAL ATTENTION.

Protect Eye: Y

Protect Skin: Y

Protect Respiratory: Y

Label Name: ZIP-CHEM PRODUCTS INC DIV OF ANDPAK INC

Label Street: 1860 DOBBIN DR

Label City: SAN JOSE

Label State: CA

Label Zip Code: 95133

Label Country: US

Label Emergency Number: 800-424-9300 ; 408-729-0291

Year Procured: 1993